This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-18 (canceled)

- 19. (new) A pharmaceutical composition comprising an isolated and purified long-chain, straight-chain 2-amino-3-hydroxyalkane, or prodrug thereof, and a pharmaceutically acceptable carrier, wherein the carbon chain in the long-chain, straight-chain 2-amino-3-hydroxyalkane is C_{16} - C_{24} .
- 20. (new) The composition according to claim 19, wherein the carbon chain in the long-chain, straight-chain 2-amino-3-hydroxyalkane is C_{18} - C_{20} .
- 21. (new) The composition according to claim 20, wherein the carbon chain in the long-chain, straight-chain 2-amino-3-hydroxyalkane is C_{18} .
- 22. (new) The composition according to claim 19, wherein the carbon chain in the long-chain, straight-chain 2-amino-3-hydroxyalkane is C₁₆.

- 23. (new) The composition according to claim 19, wherein the carbon chain in the long-chain, straight-chain 2-amino-3-hydroxyalkane is C₂₀-C₂₄.
- 24. (new) The composition according to claim 19, wherein the pharmaceutically acceptable carrier is a solution compatible with cells.
- 25. (new) The composition according to claim 19, wherein the long-chain, straight-chain 2-amino-3-hydroxyalkane is a compound of Formula I:

$$CH_3(CH_2)n$$
Formula I

where n = 12, 13, or 14.

26. (new) A method of treating cancer comprising administering a pharmaceutical composition according to any one of claims 19-25.

Docket No. 4126-4012

-4-

- 27. (new) The method according to claim 26, wherein the cancer is selected from the group of breast, head and neck, prostate, bladder, pancreas, lung, esophagus, liver, colon, thyroid, melanoma, kidney, testicular, leukemia, ovarian, gastro-intestinal, and lymphoma cancers.
- 28. (new) A method of controlling tissue and tumor vascularization by the vascular endothelium comprising administering a pharmaceutical composition according to any one of claims 19-25.
- 29. (new) A method of treating solid tumors comprising administering a composition according to claim 25, wherein n = 12.
- 30. (new) A method of treating a slow proliferating tumor comprising administering a composition according to claim 25, wherein n = 12.
- 31. (new) A method of altering Rho protein activity comprising administering a composition according to any one of claims 19-25.
- 32. (new) The composition according to any one of claims 19-25, further comprising an additional drug for combination therapy.
- 33. (new) A method of treating cancer with combination therapy comprising administering a composition according to any one of claims 19-25, wherein the composition further comprises an additional drug.

34. (new) A method of preparing a pharmaceutical composition for the treatment of cancer, wherein the method comprises the step of combining a long-chain, straight-chain 2-amino-3-hydroxyalkane with a pharmaceutically acceptable carrier, and wherein the carbon chain in the long-chain, straight-chain 2-amino-3-hydroxyalkane is C_{16} - C_{24} .

-5-

35. (new) A method according to claim 34, wherein the long-chain, straight-chain 2-amino-3-hydroxyalkane is a compound of Formula I:

where n = 12.

36. (new) A C₁₆-C₂₄ compound of Formula II:

where n is not 12.

- 37. (new) The compound according to claim 36, where n = 10.
- 38. (new) The compound according to claim 36, where n = 14-18.